

52

Notice of Allowability	Application No.	Applicant(s)	
	10/046,881	HWANG ET AL.	
	Examiner	Art Unit	
	Nguyen Ngo	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 01/15/2002.
2. ☒ The allowed claim(s) is/are 1-13.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ 7. <input type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____ |
|---|--|

DETAILED ACTION

Allowable Subject Matter

1. Claim 1-13 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

2. Claim 1 and 11 is allowable over the prior art of record since the cited references taken individually or in combination fail to particularly disclose

determining uplink transmission power by summing up (i) values determined by applying a weight based on a length of the transmission pause period to the currently measured propagation loss and an average propagation loss between the Node B and the UE during the transmission pause period, (ii) a predetermined target signal-to-interference ratio, (iii) the measured interference noise of the Node B, and (iv) an offset for compensating for the propagation loss error. It is

noted that the closest prior art, Zeira et al. (US 6603797) discloses a outer loop/weighted open loop power control which controls transmission power levels in a spread spectrum time division duplex communication station. However the stated prior art fails to disclose or render obvious to the above underline limitations as claimed.

3. Claim 4 is allowable over the prior art of record since the cited references taken individually or in combination fail to particularly disclose
detecting an offset determined considering (i) uplink transmission power used at a time slot just before the transmission pause period, (ii) a second propagation

loss between the Node B and the UE at the time slot just before the transmission pause period, (iii) a TPC command received from the Node B at the time slot just before the downlink transmission pause period, and (iv) a change in channel environment between the Node B and the UE; and determining first uplink transmission power by summing up (a) the uplink transmission power used at the time slot just before the transmission pause period, (b) a value determined by subtracting the second propagation loss from the first propagation loss, and (c) the offset. It is noted that the closest prior art, Zeira et al. (US 6603797) discloses a outer loop/weighted open loop power control which controls transmission power levels in a spread spectrum time division duplex communication station. However the stated prior art fails to disclose or render obvious to the above underline limitations as claimed.

4. Claim 13 is allowable over the prior art of record since the cited references taken individually or in combination fail to particularly disclose

a downlink transmission power controller for determining downlink transmission power for the UE based on the downlink TPC command, upon detecting an occurrence of transmission pause; an uplink TPC generator for generating an uplink TPC command for controlling uplink transmission power to be transmitted to the UE at the following frame by receiving uplink transmission power determined by the downlink transmission power controller. It is noted that the

closest prior art, Zeira et al. (US 6603797) discloses a outer loop/weighted open loop power control which controls transmission power levels in a spread spectrum time

Art Unit: 2663

division duplex communication station. However the stated prior art fails to disclose or render obvious to the above underline limitations as claimed.

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Bark et al. (US 6628956), Adaptive Power Control In A Radio Communication Systems.

b) Zeira et al. (US 6993063), Outer Loop/Weighted Open Loop Power Control.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen Ngo whose telephone number is (571) 272-8398. The examiner can normally be reached on Monday-Friday 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2663

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

N.N.

Nguyen Ngo

United States Patent & Trademark Office
Patent Examiner AU 2663
(571) 272-8398



RICKY Q. NGO
SUPERVISORY PATENT EXAMINER